Tanya M. Harding, Ph.D.
Our Ref. No. 4239-67289
Express Mail Label No. EV339203299US
FOR: ATP-BINDING TRANSPORTER (ABC7) AND METHODS
FOR DETECTION OF ANEMIA AND ATAXIA
Inventor(s): Michael C. Dean, Amy Ann Hutchinson and
Rando Lembit Allikmets
Date of Deposit: January 21, 2004

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FIGURE 1A

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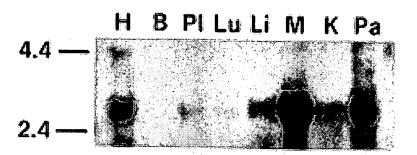
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1	ATGGCGCTGC	TCGCGATGCA	TTCTTGGCGC	TGGGCGGCCG	CGGCGGCTGC
51	TTTCGAAAAG	CGCCGGCACT	CCGCGATTCT	GATCCGGCCT	TTAGTCTCTG
101	TTAGCGGCTC	AGGTCCGCAG	TGGAGGCCAC	ATCAACTCGG	CGCCTTGGGA
151		CCTACCAGAT		TTAAAAAGTA	
201		AAAGGCAATT			
251	TCCAGGTATG	GCCACTGATA	GAAAAGAGGA	CATGTTGGCA	TGGTCATGCA
301	GGAGGAGGAC	TCCACACAGA	CCCAAAAGAA	GGGTTAAAAG	ATGTTGATAC
351	TCGGAAAATC	ATAAAAGCAA	ТССТТТСТТА	ТСТСТССССС	AAAGACAGGC
401		AGCTAGAGTT			
451		ATATTGTGGT		TTTAAATATG	
501	CCTCAACCAG	ATGTCGGGAA	ACATGCTGAA	CCTGAGTGAT	GCACCAAATA
551	CAGTTGCAAC	CATGGCAACA	GCAGTTCTGA	TTGGCTATGG	TGTATCAAGA
601	GCTGGAGCTG	CTTTTTTTAA	CGAAGTTCGA	AATGCAGTAT	TTGGCAAGGT
651		TCAATCCGAA			
					_
701		TCTGGGTTTT			
751	AAGGCTATTG	ACAGAGGAAC	AAAGGGTATC	AGTTTTGTCC	TGAGTGCTTT
801	GGTATTTAAT	CTTCTTCCCA	TCATGTTTGA	AGTGATGCTT	GTCAGTGGTG
851	TTTTGTATTA	CAAATGCGGT	GCCCAGTTTG	CTTTGGTAAC	CCTTGGAACA
901		ACACAGCATT			GCAGAACTAG
951		GAAATGAACA			
1001		GCTGAATTAT			
1051	TATGAAGCAC	AGAGATATGA	TGGATTTTTG	AAGACGTATG	AGACTGCTTC
1101	ATTGAAAAGT	ACCTCTACTC	TGGCTATGCT	GAACTTTGGT	CAAAGTGCTA
1151	TTTTCAGTGT	CGGTTTAACA	GCTATAATGG	TGCTCGCCAG	TCAGGGAATT
1201	GTGGCAGGTA	CCCTTACTGT	TGGAGATCTA	GTAATGGTGA	ATGGACTGCT
1251	TTTTCAGCTT			GGGAACTGTA	
1301		ACTCATAGAT			
	GACACCCAAA				
1401	ACAGACAGCT	ACCGTGGCCT	TTGATAATGT	GCATTTTGAA	TACATTGAGG
1451	GCCAGAAAGT	CCTTAGTGGA	ATATCCTTTG	AAGTCCCTGC	AGGAAAGAAA
1501	GTGGCCATTG	TAGGAGGTAG	TGGGTCAGGG	AAAAGCACAA	TAGTGAGGCT
1551	ATTATTTCGC				
	AAAATATACA				
	GTACCTCAGG				
	ATATGGAAAC				
1751	TAGCTGGACT	TCATGATGCA	ATTCTTCGAA	TGCCACATGG	ATATGACACC
1801	CAAGTAGGGG	AACGAGGACT	CAAGCTTTCA	GGAGGAGAAA	AGCAAAGAGT
	AGCAATTGCA				
	AAGCTACTTC				
	ATGAAGGATG				
	GTCAACAGTG				
	TAGCCGAACG				
2101	TATTCAGAAA	TGTGGCATAC	ACAGAGCAGC	CGTGTGCAGA	ACCATGATAA
2151	CCCCAAATGG	GAAGCAAAGA	AAGAAAATAT	ATCCAAAGAG	GAGGAAAGAA
	AGAAACTACA				
	TCGTGCTAAG				
	TATTTGCACT				
230I	IMITIGCACI	GAAGCAGAA I	IGITITATIA	AAAAAATCAT	ACATT

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1		TCGCGATGCA			
51	TTTCGAAAAG	CGCCGGCACT	CCGCGATTCT	GATCCGGCCT	TTAGTCTCTG
101	TTAGCGGCTC	AGGTCCGCAG	TGGAGGCCAC	ATCAACTCGG	CGCCTTGGGA
151	ACCGCTCGAG	CCTACCAGAT	TCCAGAGTCA	TTAAAAAGTA	TCACATGGCA
201	GAGATTGGGA	AAAGGCAATT	CAGGACAGTT	CTTAGATGCT	GCAAAGGCTC
251	TCCAGGTATG	GCCACTGATA	GAAAAGAGGA	CATGTTGGCA	TGGTCATGCA
301		TCCACACAGA			
351		ATAAAAGCAA			
401		AGCTAGAGTT			
451					
		ATATTGTGGT		_	CTGTAGACAG
501		ATGTCGGGAA			
551		CATGGCAACA			TGTATCAAGA
601	GCTGGAGCTG	CTTTTTTTAA	CGAAGTTCGA	AATGCAGTAT	TTGGCAAGGT
651	AGCCCAGAAT	TCAATCCGAA	GAATAGCCAA	AAATGTCTTT	CTCCATCTTC
701	ACAACCTGGA	TCTGGGTTTT	CACCTGAGCA	GACAGACGGG	AGCTTTATCT
751	AAGGCTATTG	ACAGAGGAAC	AAAGGGTATC	AGTTTTGTCC	TGAGTGCTTT
801	GGTATTTAAT	CTTCTTCCCA	TCATGTTTGA	AGTGATGCTT	GTCAGTGGTG
851		CAAATGCGGT			
901		ACACAGCATT			
951		GAAATGAACA			
1001		GCTGAATTAT			
		AGAGATATGA			
		ACCTCTACTC			
1151	TTTTCAGTGT	CGGTTTAACA	GCTATAATGG	TGCTCGCCAG	TCAGGGAATG
1201	GTGGCAGGTA	CCCTTACTGT	TGGAGATCTA	GTAATGGTGA	ATGGACTGCT
1251	TTTTCAGCTT	TCATTACCCC	TGAACTTTCT	GGGAACTGTA	TATAGAGAGA
1301	CTAGACAAGC	ACTCATAGAT	ATGAACACCT	TGTTTACTCT	ACTCAAGGTA
1351	GACACCCAAA	TTAAAGACAA	AGTGATGGCA	TCTCCCCTTC	AGATCACACC
1401	ACAGACAGCT	ACCGTGGCCT	TTGATAATGT	GCATTTTGAA	TACATTGAGG
		CCTTAGTGGA			
		TAGGAGGTAG			
		TTCTATGAGC			
		AGATGTGAGC			
		ATGCTGTCCT			
		ATCAGTGCTT			
		TCATGATGCA			
1801	CAAGTAGGGG	AACGAGGACT	CAAGCTTTCA	GGAGGAGAAA	AGCAAAGAGT
1851	AGCAATTGCA	AGAGCCATTT	TGAAGGACCC	CCCAGTCATA	CTCTATGATG
1901	AAGCTACTTC	ATCGTTAGAT	TCGATTACTG	AAGAGACTAT	TCTTGGTGCC
1951	ATGAAGGATG	TGGTCAAACA	CAGAACTTCT	ATTTTCATTG	CACACAGATT
		GTTGATGCAG			
		TGGTACCCAC			
		TGTGGCATAC			
		GAAGCAAAGA			
		AGAAGAAATT			
		TCACATAAGA			
2301	TATTIGCACT	GAAGCAGAAT	IGITTTATTA	AAAAAATCAT	ACATT

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FIGURE 2



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FIGURE 3

